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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,426	04/20/2004	Hidekazu Moriyama	119295	2552
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EXAMINER				
FLETCHER III, WILLIAM P				
ART UNIT		PAPER NUMBER		
1792				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/827,426

Applicant(s)

MORIYAMA, HIDEKAZU

Examiner

William P. Fletcher III

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) 6-14 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-5 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 20 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-850)
Paper No(s)/Mail Date 4/20/2004, 10/23/2006, 3/10/2008, 4/8/2008
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
5) ☐ Notice of Inventor's Patent Application
6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 1-5 in the reply filed on May 6, 2008, is acknowledged. The traversal is on the ground(s) that examination of all claims can be made without a serious burden. This is not found persuasive because, for the purposes of the initial requirement, a serious burden on the examiner may be *prima facie* shown if the examiner shows by appropriate explanation of separate classification, or separate status in the art, or a different field of search as defined in MPEP § 808.02, as set forth in the prior Office action. The burden on the examiner further extends to the patentability issues associated with, and evolving as a result of, searching additional inventions. Issues related to a process are frequently very different from those related to an article. For example, the issues related to the structural requirements of an article need not be familiar to an examiner of specific processes. Consequently, examination of all of the claims originally presented in this application presents a serious burden on the examiner both because of (1) a divergent or non-overlapping search related to the separate classification of the inventions and (2) the evolution of patentability issues related to searching multiple and distinct inventions.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 6-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on May 6, 2008.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information disclosure statements filed April 20, 2004, October 23, 2006, March 10, 2008, and April 8, 2008, have been considered by the Examiner.

Drawings

5. The drawings were received on April 20, 2004. These drawings are acceptable.

Specification

6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

7. Claims 3-5 are objected to because of the following informalities:

A. Claim 3 should, apparently, read "the passage is filled with the functional solution after filling the passage with the solvent contained in the functional solution."

B. Claim 4 should, apparently, read "filling the passage with purified water and, after filling the passage with purified water, the passage is filled with a water-soluble storage solution."

C. Claim 5 should, apparently, read "filling the passage with a second solvent dissolving the storage solution, and, after filling the passage with the second solvent, the passage is filled with the storage solution."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. **Claims 2, 4, and 5, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

A. Claim 2 recites the limitation "the first solvent" at line 5 of the claim. There is insufficient antecedent basis for this limitation in the claim.

B. Claim 4 recites the limitation "the purified water" at line 7 of the claim. There is insufficient antecedent basis for this limitation in the claim.

C. Claim 5 recites "the storage solution" at line 7 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Katsuragi et al. (US 2002/0008725 A1).

A. Claim 1

i. The language of this claim is broad and does not require a particular order of steps. Further, the specification does not expressly define the term "functional solution" so as to differentiate it from the claimed "purified water" or "solvent dissolving both a solvent contained in the functional solution and the purified water."

ii. Katsuragi teaches a process in which a cleaning solution is provided to an ink-jet print head from a supply tank via a conduit [Fig. 4]. It is the Examiner's position that, since the cleaning solution functions to clean the ink-jet print head [0011], it anticipates the claimed "functional solution." Further, the cleaning solution contains 60-99.95 wt.-% deionized (i.e., purified) water solvent [0053].

iii. During the cleaning operation, cleaning solution is supplied to and ejected from the print head [0105], which inherently requires a continuous supply of cleaning solution from the supply tank, through the conduit, to the print head. Such a continuous supply anticipates the repeated "filling" of the passage (i.e., conduit + head) recited by the claim. Since the cleaning solution contains up to 99.95 wt.-% deionized water, this reference anticipates the claimed "filling the passage with purified water." Since the passage is continuously and repeatedly filled with the cleaning solution of identical composition during the cleaning

process, this reference anticipates the claimed "filling the passage with a solvent dissolving both a solvent contained in the functional solution and the purified water." As noted above, since the cleaning solution functions to clean the ink-jet print head [0011], it anticipates the claimed "functional solution" and further anticipates the claimed "filling the passage with the solvent contained in the functional solution."

B. Claim 2

- i. The process of Katsuragi is detailed above.
- ii. While Katsuragi does not expressly refer to the cleaning solution as a "storage solution," neither this claim nor the instant specification imposes particular requirements, such as a particular time period for which the solution must remain in the passage, for the solution to be considered a "storage solution." Since at least some period of time must pass between the cleaning of the passage and its subsequent reactivation for ink-jet printing, the cleaning solution remaining in the passage during this time anticipates the claimed "storage solution."

C. Claim 3

- i. As explained above, since the cleaning solution functions to clean the ink-jet print head [0011], it anticipates the claimed "functional solution."
- ii. Further, as noted above, since the passage is continuously and repeatedly filled with the cleaning solution of identical composition during the cleaning process, this reference anticipates the claimed "the passage is filled

with the functional solution after filling the passage with the solvent contained in the functional solution."

D. Claim 4

i. As explained above, during the cleaning operation, cleaning solution is supplied to and ejected from the print head [0105], which inherently requires a continuous supply of cleaning solution from the supply tank, through the conduit, to the print head, and out of the print head. Such a continuous supply anticipates the repeated "filling" of the passage (i.e., conduit + head) recited by the claim, as well as the claimed "filling the passage including the liquid droplet ejection head having ejected the functional solution."

ii. Further, as noted above, neither this claim nor the instant specification imposes particular requirements, such as a particular time period for which the solution must remain in the passage, for the solution to be considered a "storage solution." Since at least some period of time must pass between the cleaning of the passage and its subsequent reactivation for ink-jet printing, the cleaning solution remaining in the passage during this time anticipates the claimed "storage solution."

E. Claim 5

i. The process of Katsuragi is detailed above. It is the Examiner's position that the cleaning solution that is 99.95 wt.-% deionized water anticipates each of the claimed "functional solution," "solvent contained in the functional solution," "first solvent," "second solvent," and "second solvent."

ii. Further, it is the Examiner's position that, during the cleaning operation, cleaning solution is supplied to and ejected from the print head [0105], which inherently requires a continuous supply of cleaning solution from the supply tank, through the conduit, to the print head, and out of the print head. Such a continuous supply anticipates the repeated "filling" of the passage (i.e., conduit + head) recited by the claims.

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 1-5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2 of copending Application No. 10/827,317. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of the co-pending claims is fully

encompassed by the instantly claimed subject matter. In other words, in performing the method of the co-pending claims, one necessarily performs the instantly claimed method.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Fletcher III whose telephone number is (571) 272-1419. The examiner can normally be reached on Sunday, 5:00 AM - 12:00 PM and Monday through Friday, 5:00 AM - 3:30 PM; on campus every Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William Phillip Fletcher III/

Primary Examiner

June 11, 2008